

U.S. GEOLOGICAL SURVEY
GEORGE OTIS SMITH, DIRECTOR

SURFICIAL GEOLOGY

NEW YORK
WATKINS GLEN QUADRANGLE

LEGEND

SEDIMENTARY ROCKS
(Areas of subaerial deposits are shown by patterns of dots and circles; subaqueous deposits by patterns of parallel lines)

Qs

Swamp muck

Qfp

Modern flood-plain alluvium

Qd

Modern deltas and alluvial fans

Qef

Alluvium in overflow channel from Lake Newberry (with sand and clay)

Qhd

Hanging deltas (coarse sand and gravel deposited in glacial lakes)

Qld

Glacial lake deposits (clay and fine sand, in places thin and with numerous outcrops of underlying till)

Qog

Outwash gravels (flood-plain deposits in channels from ice margin)

Qe

Eskers (narrow ridges of stratified drift)

Qk

Kames and kame moraines (irregular hills of stratified drift with bottle depressions)

Qm

Terminal and marginal moraines (moraine terraces and well-defined moraine ridges and terminal loops shown by denser pattern)

Qtd

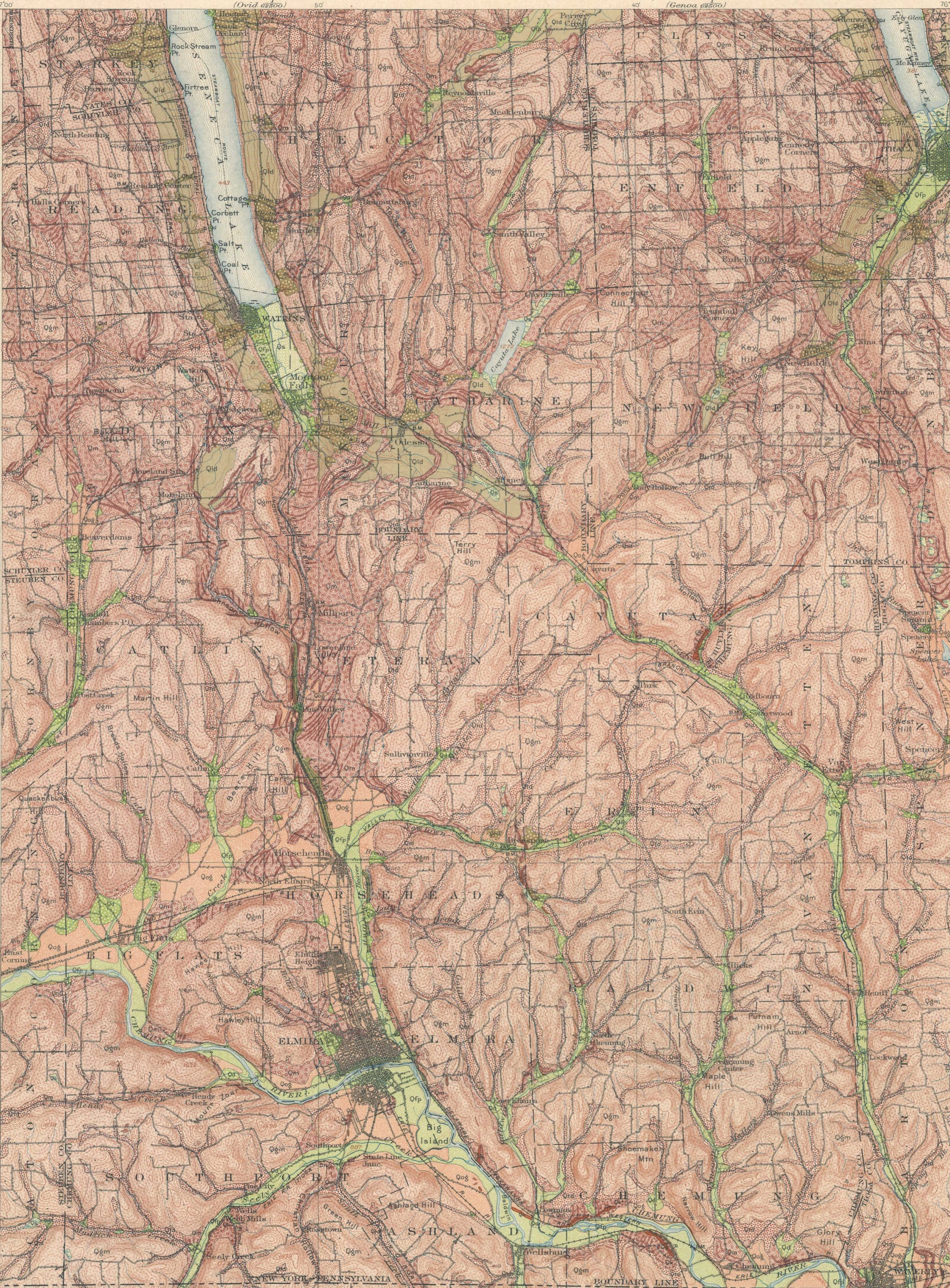
Thick drift (valley fillings and indefinite moraines)

Qgm

Ground moraine (till sheet)

QUATERNARY

Outflow channels through which streams from glaciers and glacial lakes escaped over divides
Marginal channels occupied by streams bordering ice lobes
Older striae
Most recent striae



H.M. Wilson, Geographer in charge.
Topography by Robt. D. Cummin, Jas. McCormick,
M.B. Lambert, and Nat. C. Van Doren.
Triangulation by N.Y. State Survey.
Surveyed in 1893 and 1898-99.

Scale 1:25,000
1 1/2 0 1 2 3 4 5 Miles
1 1/2 0 1 2 3 4 5 Kilometers

Contour interval 40 feet.
Datum is mean sea level.
Edition of Dec. 1908.

Geology by R.S. Tarr,
assisted by Lawrence Martin and B.S. Butler.
Surveyed in 1901-1904.

SURVEYED IN COOPERATION WITH THE STATE OF NEW YORK.

APPROXIMATE MEAN DECLINATION 1900.